

## **REMARKS**

### **Summary**

Claims 1, 3-10, 12-14, 17-23, 25-29, 31 and 33 stand in this application. Claims 2, 11, 15, 16, 24, 30 and 32 were previously canceled without prejudice. No new matter has been added. Favorable reconsideration and allowance of the standing claims are respectfully requested.

### **35 U.S.C. § 103**

At page 2, paragraph 2 of the Office Action claims 1, 3-10, 12-13, 31 and 33 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over USPN 6,321,276 to Forin ("Forin") in view of US 2002/0062402 to Regnier et al. ("Regnier") and further in view of USPN 6,741,585 to Munoz et al. ("Munoz"). At page 14, paragraph 3 of the Office Action claims 14, 17-23 and 25-26 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Forin in view of Regnier and US 2002/0016926 to Nguyen et al. ("Nguyen") and further in view of Munoz. At page 23, paragraph 4 of the Office Action claims 27-29 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Forin in view of Nguyen and further in view of Munoz. Applicant respectfully traverses the rejections, and requests reconsideration and withdrawal of the obviousness rejections.

The Office Action has failed to meet its burden of establishing a *prima facie* case of obviousness. According to MPEP § 2143, three basic criteria must be met to establish a *prima facie* case of obviousness. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of

ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991). See MPEP 706.02(j).

As recited above, to form a *prima facie* case of obviousness under 35 U.S.C § 103(a) the cited references, when combined, must teach or suggest every element of the claim. See MPEP § 2143.03, for example. Applicant respectfully submits that the Office Action has not established a *prima facie* case of obviousness because the cited references, taken alone or in combination, fail to teach or suggest every element recited in claims 1, 3-10, 12-14, 17-23, 25-29, 31 and 33. Therefore claims 1, 3-10, 12-14, 17-23, 25-29, 31 and 33 define over the cited references whether taken alone or in combination. For example, claim 1 recites the following language, in relevant part:

a first work queue pair comprising descriptors to describe data to be transmitted from a first node to a remote node of a local network and to describe where to store data received from the remote node to establish a connection-oriented virtual interface (VI) channel between the first node and the remote node in the local network based on a local physical address of the remote node, wherein the remote node comprises a second work queue pair and wherein the connection-oriented VI channel is established by associating the first work queue pair with the second work queue pair....

According to the Office Action, this language is disclosed by Forin at column 6, lines 47-55, column 15, lines 37-49 and column 17, lines 32-51. Applicant respectfully disagrees.

Applicant respectfully submits that claim 1 defines over Forin. Forin at the given cites, in relevant part, states:

Each virtual interface 106 may comprise a send queue 107 and a receive queue 108. In order to request an I/O operation, the VI user agent I/O posts descriptors to the send and receive queues. A descriptor is a data structure specifying information to assist the recoverable I/O request processor 60a of the VIA network interface adapter 100 to process an I/O request... (col. 15, lines 37-43).

...the recoverable I/O request processor receives a pointer to the descriptor corresponding to the send ( ) operation. The pointer may have been previously posted in the send queue by the VI user agent In step ST2, the recoverable I/O request processor attempts to translate the virtual memory address of the descriptor using page tables local to the VIA network interface adapter. The recoverable I/O request processor 60a then determines whether the translation was successful. (step ST3) If the translation was successful, the recoverable I/O request processor processes the send ( ) request. (col. 17, lines 32-42).

In contrast, the claimed subject matter teaches “a first work queue pair comprising descriptors to describe data to be transmitted from a first node to a remote node of a local network and to describe where to store data received from the remote node to establish a connection-oriented virtual interface (VI) channel between the first node and the remote node in the local network based on a local physical address of the remote node, wherein the remote node comprises a second work queue pair and wherein the connection-oriented VI channel is established by associating the first work queue pair with the second work queue pair...” Applicant respectfully submits that this is different than the above recited teaching of Forin.

Applicant respectfully submits that Forin fails to teach, suggest or disclose at least first and second work queue pairs at the first and remote nodes, respectively, “wherein

the connection-oriented VI channel is established by associating the first work queue pair with the second work queue pair,” a recited in claim 1. Applicant respectfully submits that Forin at the above citation, arguably, teaches send and receive queues that contain descriptors that are translated using page tables to determine if a transmission was successful. Applicant respectfully submits that this is clearly different than the above recited language of claim 1.

Moreover, Applicant respectfully submits that determining if a transmission was successful, as arguably taught by Forin, is different than establishing a VI connection by associating work queues as recited in claim 1. Moreover, Applicant respectfully submits that Regnier and Munoz also fail to teach, suggest or disclose the missing language. Therefore, Applicant respectfully submits that Forin, Regnier and Munoz, taken alone or in combination, fail to teach, suggest or disclose each and every element recited in independent claim 1 and withdrawal of the obviousness rejection with respect to claim 1 is respectfully requested.

Furthermore, Applicant respectfully submits that claim 1 additionally recites the following language, in relevant part:

wherein the local physical address of the remote node is  
embedded or provided within the legacy physical address  
of the remote node.

As correctly noted in the Office Action on page 5, Forin “does not explicitly show the second physical address is embedded within the first physical address.” According to the Office Action, this language is disclosed by Munoz at column 2, lines 10-30. Applicant respectfully disagrees.

Applicant respectfully submits that the above recited language of claim 1 defines over Munoz. Munoz at the given cites, in relevant part, states:

... a system that uses encapsulated/mapped addresses with routing protocol dissemination of reachability information in an internetwork that includes a first network using first network addressing communicating via one or more internetworking gateways with a second network using second network addressing. The gateways register one or more first network addresses in the second network as first network address-encapsulated or - mapped second network addresses. Reachability information regarding the first network address-encapsulated or -mapped second network addresses is then disseminated through the second network. When a communication request containing a first network destination address is received at one of the gateways, the receiving gateway performs encapsulation or mapping of the first network destination address into a first network-encapsulated or -mapped second network destination address. It then routes a communication request containing the first network-encapsulated or -mapped second network destination address through the second network based on the disseminated reachability information.

By way of contrast, the claimed subject matter teaches “wherein the local physical address of the remote node is embedded or provided within the legacy physical address of the remote node.” Applicant respectfully submits that this is different than the above recited teaching of Munoz.

Applicant respectfully submits that Munoz at the given citation, arguably, teaches a first network with first network addressing and a second network with second network addressing wherein gateways perform mapping of the first network destination address into a first network-encapsulated or mapped second network destination address. Applicant respectfully submits that altering the form of a first network address, as arguably taught by Munoz, is different than embedding a first physical address within a

second physical address as recited in claim 1. Therefore, Applicant respectfully submits that Munoz fails to disclose, teach or suggest the missing language. Applicant respectfully submits that Forin and Regnier also fail to disclose the missing language. Consequently, Forin, Regnier and Munoz, whether taken alone or in combination, fail to disclose, teach or suggest every element recited in claim 1.

Furthermore, if an independent claim is non-obvious under 35 U.S.C. § 103, then any claim depending therefrom is non-obvious. *See* MPEP § 2143.03, for example. Accordingly, removal of the obviousness rejection with respect to claim 1 is respectfully requested. Claims 3-5 also are non-obvious and patentable over the cited references, taken alone or in combination, at least on the basis of their dependency from claim 1. Applicant, therefore, respectfully requests the removal of the obviousness rejection with respect to these dependent claims.

Applicant respectfully submits that independent claims 6, 14, 21, 27, 31 and 33 recite features similar to those recited in claim 1. As recited above, Applicant respectfully submits that Forin, Regnier and Munoz fail to teach, suggest or disclose each and every element recited in claim 1. Furthermore, Applicant respectfully submits that Nguyen also fails to teach, suggest or disclose the above recited missing language. Therefore, Applicant respectfully submits that claims 6, 14, 21, 27, 31 and 33 are not obvious and are patentable over the cited references, taken alone or in combination, for reasons analogous to those presented above with respect to claim 1. Accordingly, Applicant respectfully requests removal of the obviousness rejection with respect to claims 6, 14, 21, 27, 31 and 33.

Furthermore, Applicant respectfully submits that if an independent claim is non-obvious under 35 U.S.C. § 103, then any claim depending therefrom is non-obvious. *See* MPEP § 2143.03, for example. Accordingly, removal of the obviousness rejection with respect to claims 1, 6, 14, 21, 27, 31 and 33 is respectfully requested. Claims 3-5, 7-10, 12-13, 17-20, 22-23, 25-26 and 28-29 also are non-obvious and patentable over the cited references, taken alone or in combination, at least on the basis of their dependency from claims 1, 6, 14, 21, 27, 31 and 33 respectively. Applicant, therefore, respectfully requests the removal of the obviousness rejection with respect to these dependent claims.

For at least the reasons given above, claims 1, 3-10, 12-14, 17-23, 25-29, 31 and 33 are non-obvious and represent patentable subject matter in view of the cited references, whether taken alone or in combination. Accordingly, removal of the obviousness rejection with respect to claims 1, 3-10, 12-14, 17-23, 25-29, 31 and 33 is respectfully requested. Further, Applicant submits that the above-recited novel features provide new and unexpected results not recognized by the cited references. Accordingly, Applicant submits that the claims are not anticipated nor rendered obvious in view of the cited references.

Applicant does not otherwise concede, however, the correctness of the Office Action's rejection with respect to any of the dependent claims discussed above. Accordingly, Applicant hereby reserves the right to make additional arguments as may be necessary to further distinguish the dependent claims from the cited references, taken alone or in combination, based on additional features contained in the dependent claims that were not discussed above. A detailed discussion of these differences is believed to

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be unnecessary at this time in view of the basic differences in the independent claims pointed out above.

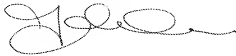
It is believed that claims 1, 3-10, 12-14, 17-23, 25-29, 31 and 33 are in allowable form. Accordingly, a timely Notice of Allowance to this effect is earnestly solicited.

The Examiner is invited to contact the undersigned at 724-933-9338 to discuss any matter concerning this application.

The Office is hereby authorized to charge any additional fees or credit any overpayments under 37 C.F.R. § 1.16 or § 1.17 to deposit account 50-4238.

Respectfully submitted,

KACVINSKY LLC



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John F. Kacvinsky, Reg. No. 40,040  
Under 37 CFR 1.34(a)

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